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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,241

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Roger Philip Duffy

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EXAMINER

WATKINS III, WILLIAM P

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

10/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/518,241

Applicant(s)

DUFFY, ROGER PHILIP

Examiner

William P. Watkins III

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. The rejections under 35 U.S.C. 102 given in section 2 of the detailed portion of the office action mailed 22 March 2007 are withdrawn in view of applicant's arguments in the amendment filed 24 July 2007. New grounds of rejection are given below.

2. The rejection under 35 U.S.C. 101 given in section 3 of the detailed portion of the office action mailed 22 March 2007 is withdrawn in view of the cancellation of claim 10.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (U.S. 2,847,086) in view of Carawan (U.S. 6,203,592 B1).

Muller teaches in Figures 6 and 15 a filtering material that has outer perforated support sheets that have different patterns perforations in the top and bottom layers and inner filter media that comprises fiber batts. The outer layers may be metal films and the filter media may have inorganic fibers (col. 4, lines 1-10) to resist higher temperatures. Carawan teaches the use of metal meshes and screens as equivalent in filtering ability to fiber batts (col. 3, lines 20-40). The instant invention claims perforated outer layers with different perforation patterns and meshes between the outer layers where the composite can function as a breather sheet.

It would have been obvious to one of ordinary skill of the art to have used a metal or other mesh as the filter media of Muller in order to provide an alternate filter media that can resist higher temperatures and pressures and still have filtering ability because of the teaching of Carawan. The filter material of the combination is taken as having the structural strength and porosity to allow vapor to migrate out of a laminate during molding and therefore the capability to function as a breather sheet. Using adhesive is a well known supplemental way of consolidating laminates that can be used with the needling of Muller. One of ordinary skill in the art

Art Unit: 1772

using adhesive to laminate a composite with perforations that must breath would apply the adhesive in a pattern so as not to block the perforations.

5. Claims 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (U.S. 2,847,086) in view of Carawan (U.S. 6,203,592 B1) as applied to claims 1-9 and 11-13 above, and further in view of Kromrey (U.S. 4,983,341).

Muller in view of Carawan teaches a sheet that has pressure and temperature resistance as noted above. Kromrey teaches the use of a porous laminate as a breather sheet that has a sufficient fluid path to allow venting of gases and withstand high pressure (abstract). It would have been obvious to use the laminate of Muller in view of Carawan as the breather sheet of Kromrey in order to have vapor venting under raised temperature and pressure conditions because of the teachings of the properties of the laminate by Muller and Carawan and the teachings of the properties needed for a breather sheet by Kromrey. The references of the combination all address the common problem of composites that allow vapor and fluid flow.

Art Unit: 1772

6. Applicant's arguments with respect to claims 1-9 and 11-20 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Watkins III whose telephone number is 571-272-1503. The examiner works an increased flex time schedule, but can normally be reached Monday through Friday, 11:30 A.M. through 8:00 P.M. Eastern Time. The examiner returns all calls within one business day unless an extended absence is noted on his voice mail greeting.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WILLIAM P. WATKINS III
PRIMARY EXAMINER



WW/ww

September 29, 2007